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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

John C. Simmons

APPLN. TYPE

Germantown, TN 38138

10/15/2008

7993 Cavershamwood Ln.

11/21/2003

SMALL ENTITY

**EXAMINER** 

MALAMUD, DEBORAH LESLIE

ART UNIT

PAPER NUMBER

9883

DATE DUE

3766

DATE MAILED: 10/15/2008

TOTAL FEE(S) DUE

10/718,348 John C. Simmons TITLE OF INVENTION: INTELLIGENT ASSISTED CONTROL OF LIVING BODIES

ISSUE FEE DUE

PUBLICATION FEE DUE nonprovisional YES \$755 \$300 \$0 \$1055 01/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:** 

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CURRENT CORRESPONDE		ock 1 for any change of address)	Fee(	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
John C. Simmo 7993 Caversham Germantown, TN	wood Ln.	/2008	I her State addr trans	Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the Unite States Postal Service with sufficient postage for first class mail in an envelop addressed to the Mail Stop ISSUE FEE address above, or being facsimil transmitted to the USPTO (571) 273-2885, on the date indicated below.			
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	Α	TTORNEY DOCKET NO.	CONFIRMATION NO.	
10/718,348 ITTLE OF INVENTION	11/21/2003 : INTELLIGENT ASSIS	STED CONTROL OF LIV	John C. Simmons VING BODIES			9883	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE F	EE TOTAL FEE(S) DUI	E DATE DUE	
nonprovisional	YES	\$755	\$300	\$0	\$1055	01/15/2009	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
MALAMUD, DEI	BORAH LESLIE	3766	607-058000	1			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ess an assignee is ident n in 37 CFR 3.11. Comp	" Indication form led. Use of a Customer A TO BE PRINTED ON T	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be particularly (print or type data will appear on the part a substitute for filing an a (B) RESIDENCE: (CITY)	ely, firm (having as a mgent) and the names neys or agents. If no orinted.  e) tent. If an assignee ssignment.	ember a 2of up to name is 3is identified below, the of	document has been filed for	
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4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			<ul> <li>b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul>				
a. Applicant claims	t <b>us</b> (from status indicated s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long	_			
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	e applicant; a registe	red attorney or agent; or t	he assignee or other party in	
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This collection of informan application. Confident submitting the completed this form and/or suggest Nov. 1450. Alexandria	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450 DC	CFR 1.311. The information U.S.C. 122 and 37 CFR USPTO. Time will vary to be sent to the DNOT SEND FEES OF 4	on is required to obtain or re 1.14. This collection is esti depending upon the indivi- e Chief Information Office COMPLETED FORMS TO	etain a benefit by the mated to take 12 min dual case. Any comin r, U.S. Patent and Tr D. THIS ADDRESS	public which is to file (ar nutes to complete, includi ments on the amount of t addemark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete out of Commerce, P.O. for Patents P.O. Box 1450.	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,348	11/21/2003	John C. Simmons		9883
7590 10/15/2008			EXAMINER	
John C. Simmons			MALAMUD, DEBORAH LESLIE	
7993 Cavershamwo		ART UNIT	PAPER NUMBER	
Germantown, TN 3	88138		3766	
		DATE MAILED: 10/15/200	8	

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 663 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 663 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)					
	   10/718,348	SIMMONS, JOHN C.					
Notice of Allowability	Examiner	Art Unit					
	DEBORAH MALAMUD	3766					
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in the or other appropriate communing GHTS. This application is substand MPEP 1308.	nis application. If not included cation will be mailed in due course. <b>THIS</b> bject to withdrawal from issue at the initiative					
1. This communication is responsive to the Request for Conti	nued Examination received 14	<u> 1 July 2008</u> .					
2. ☑ The allowed claim(s) is/are <u>35-64</u> .							
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> </ul>	been received. been received in Application	No					
3. Copies of the certified copies of the priority documents have been received in this national stage application from the							
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EXAM	IINER'S AMENDMENT or NOTICE OF					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.						
(a) ☐ including changes required by the Notice of Draftspers		PTO-948) attached					
1)  hereto or 2)  to Paper No./Mail Date							
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1)							
each sheet. Replacement sheet(s) should be labeled as such in t							
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.  ☐ Interview Sum Paper No./Ma 7.	rmal Patent Application nmary (PTO-413), ail Date mendment/Comment ratement of Reasons for Allowance					

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### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 July 2008 has been entered.
- 2. Claims 2, 7-9, 11-12, 17, 20, 24-27 and 30-34 are withdrawn; claims 1, 3-6, 10, 13-16, 18-19, 21-23 and 28-29 are pending.

#### Election/Restrictions

3. Claims 1, 3-6, 10, 13-16, 18-19, 21-23 and 28-29 are allowable. The restriction requirement among species A-D (claims 6-12, 17 and 20-27), as set forth in the Office action mailed on 26 March 2007, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim. Claims 7-9, 11-12, 17 and 20-27, directed to different species, are no longer withdrawn from consideration because the claim(s) requires all the limitations of an allowable claim. However, claims 30-34, directed to different inventions, remain withdrawn from consideration because they do not require all the limitations of an allowable claim.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

# Claim Objections

4. In view of the amendments received 14 July 2008, the Examiner withdraws the objection to claims 7-9, 11-12, 17-20, 24-27 and 30-34.

#### Response to Arguments

5. Applicant's arguments, see "Remarks," filed 14 July 2008, with respect to the amended subject matter of claim 1 have been fully considered and are persuasive. The rejection of claim 1 and its dependent claims has been withdrawn.

#### **EXAMINER'S AMENDMENT**

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided

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by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- 7. Authorization for this examiner's amendment was given in a telephone interview with John Simmons on 26 September 2008, and on 09 October 2008.
- 8. The application has been amended as follows:

In the claims:

Claims 1-34 are cancelled.

Claims 35-64 are entered, which contain the subject matter of claims 1 and 3-29 of the claims as submitted on 21 November 2003 and 14 July 2008, and read as follows:

35. A device for the direction of a living body comprising:

a plurality of stimulators whose positions indicate a selected one of the group comprising: A. a spatial direction, B. a pattern relatable to a behavior and C. any combinations of A and B; and

a behavior controller operatively connected to stimulators for directing stimulations; and

a data communication device for communications between the behavior controller and external sources of a selected one of the group comprising: A. data, B. human-directed control, C. computer-directed control, and D. combinations of A, B, and C; and

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a power source for the provision of power to components requiring power;

whereby a potentially distant entity can direct the wearer of the device to perform potentially complex actions.

- 36. The device of claim 35, wherein: the communication device is effected by a selected one of the group comprising A. radio, B. wire, C. video transmission, D. infra-red transmission, E. any practical wireless means of data communication, and F. any combination of A, B, C, D, and E.
- 37. The device of claim 35, wherein: the stimulators are located in the mouth.
- 38. The device of claim 35, further comprising: a self-attaching housing for enabling the components to be placed in and removed from the mouth.
- 39. The device of claim 35, wherein: the location of a stimulation from a stimulator indicates a direction.
- 40. The device of claim 35, wherein: the location of a stimulation from stimulation means indicates the amount of change desired.

41. The device of claim 35, wherein: the location of a stimulation from stimulation means indicates both a direction and the amount of change desired.

- 42. The device of claim 35, wherein: a series of points indicated by stimulation means create the perception of a line, or arrow, or shape, or any combination thereof to indicate a direction.
- 43. The device of claim 35, wherein: a series of points indicated by stimulators creates the perception of a selected one of the group comprising A. line,
  B. arrow, C. shape, and D any combination of A, B, and C to indicate a distance to be achieved.
- 44. The device of claim 35, wherein: a series of points indicated by stimulation means create the perception of a line, or arrow, or shape, or any combination thereof to indicate both the direction and the amount of distance to be communicated.
- 45. The device of claim 35, wherein: a series of points indicated by stimulation means create the perception of a line, or arrow, or shape, or any combination thereof with said points occurring over time to create a perceived motion;

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whereby the direction can be emphasized by the moving pattern moving in that direction, or the distance to be communicated can be communicated by the length of the pattern, or the speed desired to be communicated can be communicated by the timing delays between the sequential stimulations, or any combination thereof

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- 46. The device of claim 35, wherein: a plurality of stimulators are arrayed in a roughly circular or semi-circular area so that they may be related by the mind to direction;
  whereby a stimulation at a point in the roughly circular or semi-circular
  - array corresponding to a direction in the current environment may be perceived as an indication of angle or degrees of change.
- 47. The device of claim 35 further comprising: a sensor operatively connected to the behavior controller for sensing a selected one of the group comprising A. direction, B. attitudes, C. speed, and D. any combination of A, B, and (2; of the body; whereby the behavior controller can monitor and automatically respond to user performance.
- 48. The device of claim 35 further comprising: a sensor operatively connected to the behavior controller for sensing a selected one of the group comprising A. sounds, B. vibrations, and C. any combination of A and B;

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whereby the behavior controller may monitor to sense potential problems or undesirable behavior and stimulate a corrective behavior to correct it.

- 49. The device of claim 48, wherein: all or part of the assembly is in or adequately proximate to the mouth; whereby TMJ, or tooth grinding, or cheek biting, or snoring or other detrimental oral activities, or any combination thereof, are prevented or minimized by corrective actions directed by the behavior controller.
- 50. The device of claim 35 further comprising: a battery for provision of power.
- 51. The device of claim 35, wherein: power, or additional power, or backup power, or any combination thereof for the behavior controller, or any elements of the assembly requiring power, or any combination thereof, are provided by a wire, or any wireless power transmission means, or any combination thereof.
- 52. The device of claim 35, wherein: behavior controller means includes a fully functional computer processor.

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53. The device of claim 35 further comprising: GPS (Global Positioning System) means operatively connected to behavior controller means; whereby behavior controller means can manage the behavior of the body being directed with respect to a map, or a path, or a direction, or an area on the map, or any combination thereof by comparing the actual GPS position with a desired position and directing the body accordingly.

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- 54. The device of claim 35 further comprising: a remote controller located external to the behavior controller for allowing a selected one of the group comprising A. a person, B. a machine, and C. any combination of A and B, to monitor the status of the body and direct its actions by sending instructions to the behavior controller; and a data transmitter operatively connected to the behavior controller and remote controller for allowing communications between them; whereby the remote controller can manage the behavior of the body being directed.
- 55. The device of claim 54 further comprising: GPS operatively connected through the data transmitter to the remote controller; whereby the remote controller can manage the path of the body being directed.

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56. The device of claim 54 further comprising: a video camera operatively connected to the remote controller through the data transmitter.

57. The device of claim 54 further comprising: a pointing means operatively connected to remote control means for selecting a desired direction or point;

whereby any graphical, or GPS map-based, or video-based image, or any combination thereof available to the remote control means can help a remote operator quickly identify a desired point or direction by pointing it out on the image with a mouse, or joystick, or any other point or area identifying device.

58. The device of claim 54 further comprising:

a steering means;

whereby a remote operator may steer the remote body with a steering wheel, joystick, keyboard, or any other device capable of left-right steering control and the remote control means can translate those actions to desired directions of change which will result in stimulations directing those changes.

59. The device of claim 58, wherein: the remote operator's directing device additionally provides a third dimension of control;

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whereby the directing device, which may be a joystick or any directing mechanism capable of three-dimensional control, can also direct a third dimension of direction.

60. The device of claim 54 further comprising:

speed control means;

whereby the remote operator, using any kind of accelerator, brake, joystick, or any other combination of user-interface control devices, can indicate an increase or decrease in the desired speed which is ultimately converted into stimulations delivered to the body.

- 61. The device of claim 35, wherein: the stimulators have or include a positive reinforcement component; whereby a selected one of the group comprising A. pleasant vibrations, B. cooling points, C. stimulations that will be perceived as positive to the body, and D. any combination of A, B, and C, are delivered to encourage a positive behavior.
- 62. The device of claim 61, wherein: positive stimulations are made to erogenous zones.

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63. The device of claim 35, further wherein the stimulators provide positive reinforcement for obedience, or negative reinforcement for disobedience or both.

64. The device of claim 63, wherein: other external rewards, or punishments, or teaching aids, or any combination thereof are incorporated by the automated procedure to enhance the speed and depth of the learning experience; whereby visual aids, video images to prompt a behavior, or auditory prompts, or dispensed reward treats, or other useful teaching aids that can be directed by a computer, or any combination thereof, allow more rapid and pleasant automated training.

## Allowable Subject Matter

9. Claims 35-64 are allowed.

#### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBORAH MALAMUD whose telephone number is (571)272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/ Supervisory Patent Examiner, Art Unit 3766

/Deborah L. Malamud/ Examiner, Art Unit 3766